

CLAIMS

What is claimed is:

Claim 1. A method for treating a patient suffering from a cancerous disease comprising:

administering to said patient anti-cancer antibodies or fragments thereof produced in accordance with a method for the production of individually customized anti-cancer antibodies which are useful in treating a cancerous disease, said antibodies including a subset of antibodies or fragments thereof characterized as being cytotoxic against cells of a cancerous tissue, said subset being essentially benign to non-cancerous cells;

wherein one or more antibodies or fragments thereof selected from said subset are placed in admixture with a pharmaceutically acceptable adjuvant and are administered in an amount effective to mediate treatment of said cancerous disease;

said one or more antibodies or fragments thereof being selected from the group consisting of a 1LN-8, 4BD-1, a 4BD-3, a 4BD-6, a 4BD-9, a 4BD-13, a 4BD-18, a 4BD-20, a 4BD-25, a 4BD-26, a 4BD-27, a 4BD-28, a 4BD-32, a 4BD-37, a 4BD-50, a 6BD-1, a 6BD-3, a 6BD-5, a 6BD-11, a 6BD-25, a 7BD-7, a 7BD-12-1, a 7BD-12-2, a 7BD-13, a 7BD-14, a 7BD-19, a 7BD-21, a 7BD-24, a 7BD-29, a 7BD-30, a 7BD-31, a 7BDI-17, a 7BDI-58, a 7BDI-60, a 7BDI-62, a 5LAC2, a 5LAC4, a 5LAC20, a 5LAC23, a

1 H460-1, a H460-4, a H460-5, a H460-10, a H460-14, a H460-16-  
2 1, a H460-16-2, a H460-23 and a H460-27 monoclonal antibody  
3 or combinations thereof.  
4

5 Claim 2. The method for treating a patient suffering  
6 from a cancerous disease in accordance with claim 1, wherein  
7 said one or more antibodies or fragments thereof selected  
8 from said subset are humanized.  
9

10 Claim 3. The method for treating a patient suffering  
11 from a cancerous disease in accordance with claim 1  
12 comprising:

13 conjugating said subset of antibodies or fragments  
14 thereof with a member selected from the group consisting of  
15 toxins, enzymes, radioactive compounds, and hematogenous  
16 cells; and

17 administering conjugated antibodies or fragments thereof  
18 to said patient;

19 wherein said conjugated antibodies are placed in  
20 admixture with a pharmaceutically acceptable adjuvant and are  
21 administered in an amount effective to mediate treatment of  
22 said cancerous disease.  
23

24 Claim 4. The method of claim 3, wherein said one or  
25 more antibodies or fragments thereof selected from said  
26 subset are humanized.

1           Claim 5. The method for treating a patient suffering  
2   from a cancerous disease in accordance with claim 1 wherein:  
3           the cytotoxicity of said antibodies or fragments thereof  
4   is mediated through antibody dependent cellular toxicity.

5  
6           Claim 6. The method for treating a patient suffering  
7   from a cancerous disease in accordance with claim 1 wherein:  
8           the cytotoxicity of said antibodies or fragments thereof  
9   is mediated through complement dependent cellular toxicity.

10  
11          Claim 7. The method for treating a patient suffering  
12   from a cancerous disease in accordance with claim 1 wherein:  
13          the cytotoxicity of said antibodies or fragments thereof  
14   is mediated through catalyzing of the hydrolysis of cellular  
15   chemical bonds.

16  
17          Claim 8. The method for treating a patient suffering  
18   from a cancerous disease in accordance with claim 1 wherein:  
19          the cytotoxicity of said antibodies or fragments thereof  
20   is mediated through producing an immune response against  
21   putative cancer antigens residing on tumor cells.

22  
23          Claim 9. The method for treating a patient suffering  
24   from a cancerous disease in accordance with claim 1 wherein:

1       the cytotoxicity of said antibodies or fragments thereof  
2       is mediated through targeting of cell membrane proteins to  
3       interfere with their function.

4  
5       Claim 10. The method for treating a patient suffering  
6       from a cancerous disease in accordance with claim 1 wherein:  
7       the cytotoxicity of said antibodies or fragments thereof  
8       is mediated through production of a conformational change in  
9       a cellular protein effective to produce a signal to initiate  
10      cell-killing.

11  
12      Claim 11. The method for treating a patient suffering  
13      from a cancerous disease in accordance with claim 1 wherein:  
14      said method of production utilizes a tissue sample  
15      containing cancerous and non-cancerous cells obtained from a  
16      particular individual.

17  
18      Claim 12. A method for treating a patient suffering from  
19      a cancerous disease comprising:  
20      administering to said patient anti-cancer antibodies or  
21      fragments thereof produced in accordance with a method for  
22      the production of individually customized anti-cancer  
23      antibodies which are useful in treating a cancerous disease,  
24      said antibodies including a subset of antibodies or fragments  
25      thereof characterized as being cytotoxic against cells of a

1 cancerous tissue, said subset being essentially benign to  
2 non-cancerous cells;

3 wherein one or more antibodies or fragments thereof  
4 selected from said subset are placed in admixture with a  
5 pharmaceutically acceptable adjuvant and are administered in  
6 an amount effective to mediate treatment of said cancerous  
7 disease;

8 said one or more antibodies or fragments thereof  
9 produced by a hybridoma cell line having an ATCC Accession  
10 Number selected from the group consisting of ( ) or  
11 combinations thereof.

12  
13 Claim 13. The method for treating a patient suffering  
14 from a cancerous disease in accordance with claim 12, wherein  
15 said one or more antibodies or fragments thereof selected  
16 from said subset are humanized.

17  
18 Claim 14. The method for treating a patient suffering  
19 from a cancerous disease in accordance with claim 12  
20 comprising:

21 conjugating said subset of antibodies or fragments  
22 thereof with a member selected from the group consisting of  
23 toxins, enzymes, radioactive compounds, and hematogenous  
24 cells; and

25 administering conjugated antibodies or fragments thereof  
26 to said patient;

1        wherein said conjugated antibodies are placed in  
2        admixture with a pharmaceutically acceptable adjuvant and are  
3        administered in an amount effective to mediate treatment of  
4        said cancerous disease.

5  
6        Claim 15. The method of claim 14, wherein said one or  
7        more antibodies or fragments thereof selected from said  
8        subset are humanized.

9  
10       Claim 16. The method for treating a patient suffering  
11       from a cancerous disease in accordance with claim 12 wherein:  
12       the cytotoxicity of said antibodies or fragments thereof  
13       is mediated through antibody dependent cellular toxicity.

14  
15       Claim 17. The method for treating a patient suffering  
16       from a cancerous disease in accordance with claim 12 wherein:  
17       the cytotoxicity of said antibodies or fragments thereof  
18       is mediated through complement dependent cellular toxicity.

19  
20       Claim 18. The method for treating a patient suffering  
21       from a cancerous disease in accordance with claim 12 wherein:  
22       the cytotoxicity of said antibodies or fragments thereof  
23       is mediated through catalyzing of the hydrolysis of cellular  
24       chemical bonds.

1           Claim 19. The method for treating a patient suffering  
2   from a cancerous disease in accordance with claim 12 wherein:  
3           the cytotoxicity of said antibodies or fragments thereof  
4   is mediated through producing an immune response against  
5   putative cancer antigens residing on tumor cells.

6  
7           Claim 20. The method for treating a patient suffering  
8   from a cancerous disease in accordance with claim 12 wherein:  
9           the cytotoxicity of said antibodies or fragments thereof  
10   is mediated through targeting of cell membrane proteins to  
11   interfere with their function.

12  
13          Claim 21. The method for treating a patient suffering  
14   from a cancerous disease in accordance with claim 12 wherein:  
15          the cytotoxicity of said antibodies or fragments thereof  
16   is mediated through production of a conformational change in  
17   a cellular protein effective to produce a signal to initiate  
18   cell-killing.

19  
20          Claim 22. The method for treating a patient suffering  
21   from a cancerous disease in accordance with claim 12 wherein:  
22          said method of production utilizes a tissue sample  
23   containing cancerous and non-cancerous cells obtained from a  
24   particular individual.





1 providing an isolated monoclonal antibody or antigen  
2 binding fragment thereof encoded by the clone deposited with  
3 the ATCC as Accession Number PTA-2700;  
4 contacting said isolated monoclonal antibody or antigen  
5 binding fragment thereof with said tissue sample; and  
6 determining binding of said isolated monoclonal antibody  
7 or antigen binding fragment thereof with said tissue sample;  
8 whereby the presence of said cancerous cells in said  
9 tissue sample is indicated.

10

11 Claim 26. A process of isolating or screening for  
12 cancerous cells in a tissue sample selected from a tumor  
13 originating in colon, prostate, ovarian, lung, breast, or  
14 skin tissue comprising:

15 providing a tissue sample from a tumor originating in  
16 colon, prostate, ovarian, lung, breast, or skin tissue;

17 providing an isolated monoclonal antibody or antigen  
18 binding fragment thereof encoded by the clone deposited with  
19 the ATCC as Accession Number PTA-2700;

20 contacting said isolated monoclonal antibody or antigen  
21 binding fragment thereof with said tissue sample; and

22 determining binding of said isolated monoclonal antibody  
23 or antigen binding fragment thereof with said tissue sample;

24 whereby said cancerous cells are isolated by said  
25 binding and their presence in said tissue sample is  
26 confirmed.